



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,181	09/14/2000	Richard J. McCurdy	L10389	2443

7590 08/29/2003
Philip S Oberlin
Marshall & Melhorn
Four Seagate Eighth Floor
Toledo, OH 43604

EXAMINER

CHEN, BRET P

ART UNIT	PAPER NUMBER
----------	--------------

1762

DATE MAILED: 08/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-25

Office Action Summary

Application No.
09/662,181

Applicant(s)
Richard J. McCurdy

Examiner
Bret Chen

Art Unit
1762



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jun 20, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-42, 44, and 47-99 is/are pending in the application.
- 4a) Of the above, claim(s) 56-99 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-42, 44, and 47-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 1762

DETAILED ACTION

Claims 33-42, 44, 47-99 are pending in this application. Amended claims 35, 39, 41, 47, 49, 51, 53, 55, canceled claims 43, 45-46 are noted from the amendment dated 6/20/03.

Newly added claims 87-99 are noted from the amendment dated 5/14/03. Since said claims are directed to a product, these claims have been withdrawn from consideration. Claims 56-99 are withdrawn from consideration as being directed to a nonelected invention.

The amendment dated 6/20/03 has been entered and carefully considered. The examiner appreciates the amendments to the specification and claims. In view of said amendment, the objections to the abstract and title have been withdrawn.

Claim Rejections - 35 USC § 112

1. Claims 33-42, 44, 47-55 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitations listed below are deemed new matter as there appears to be no support for same in the specification as originally filed:

In claim 33, the terms "first major surface" and "opposite major surface" are deemed new matter. The same issue applies to claims 35, 47, 49.

Art Unit: 1762

In claim 33, the limitation of “tin diffused therein” is deemed new matter. The same issue applies to claims 35, 47, 49.

In claim 33 line 10, the term “in the crystalline phase” is deemed new matter. The same issue applies to claims 35, 41, 47, 49, 51, 55.

In claim 33 line 10, the term “photocatalytically-activated self-cleaning coating” is deemed new matter. The same issue applies to claims 35, 37, 40-43, 47, 49, 51, 54, 55.

In claim 35, the term “annealing ... in air” is deemed new matter. The same issue applies to claim 49.

In claim 37, the phrases “melting glass batch materials in a furnace”, “delivering the molten glass onto a bath of molten tin”, “pulling the molten glass across the tin bath whereupon the glass is sized and controllably cooled”, “to form a dimensionally stable glass float ribbon, “moving the float ribbon by conveying roller through a lehr”, “moving the float ribbon to a cutting station on conveying rollers where the ribbon is cut into glass sheets” are deemed new matter. The same issue applies to claim 51.

In claim 39, the limitation of having a coating thickness “up to 1300A” is deemed new matter. While it is noted that a thickness of 1300 is listed in Example 5 of Table 1, there is no support for said limitation above. The same issue applies to claims 41, 46, 53, 55.

In claim 42 lines 6-7, the phrase “said silica layer inhibits migration of sodium ions ... self-cleaning coating” is deemed new matter.

In claim 44, the term “glass sheet” is deemed new matter.

Art Unit: 1762

In claim 47, the limitation "said coating has a photocatalytically-activated self-cleaning reaction rate of at least about 8.1×10^{-3} to $9.1 \times 10^{-3} \text{ cm}^{-1} \text{ min}^{-1}$ " is deemed new matter. The same issue applies to claim 49, 51, 55.

2. Claims 33-42, 44, 47-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 35, it is not clear whether the depositing step is different from the production step. Clarification and appropriate amendments are requested.

Response to Arguments

3. Applicant's arguments filed 6/20/03 have been fully considered but they are not persuasive.

Applicant first argues that Figures 1 and 2 show a first major surface and an opposite major surface (p.7 last three paragraphs).

The examiner disagrees. Nowhere in the figures is there a showing of a major surface nor an opposite major surface. Furthermore, the original specification never mentions a first major surface and an opposite major surface. It should be noted that matter not in the original specification, claims, or drawings is usually new matter. Depending on circumstances such as the adequacy of the original disclosure, the addition of inherent characteristics such as chemical or physical properties, a new structural formula or a new use may be new matter MPEP 608.04 (a).

Art Unit: 1762

Applicant next argues that one skilled in the art would know that tin is diffused into the glass ribbon when forming a glass float ribbon on a tin bath (p.8 3rd fill paragraph).

The examiner disagrees. It is noted that nowhere in the original specification is there any mention of tin diffusing into the glass float ribbon. Furthermore, the argument that one skilled in the art would know that tin is diffused in appears to be mere speculation.

Applicant next argues that when titanium dioxide is deposited and annealed, it will be inherently crystalline and refers to Example 1 and p.18 of the specification as well as the McCurdy Declaration dated 6/20/03 for support (p.9 last paragraph). Applicant further argues that the term “photocatalytically-activated self-cleaning coating” is supported by the McCurdy Declaration (p.10 5th paragraph)

The examiner disagrees. It is first noted that nowhere in Example 1 and p.18 of the specification is there any mention that the titanium dioxide is crystalline. In addition, there is no mention anywhere in the original specification about a photocatalytically-activated self-cleaning coating. Furthermore, the applicant has not provided any factual evidence that titanium dioxide when deposited and annealed will be inherently crystalline or photocatalytically-activated self-cleaning. Hence, applicant’s arguments appear to be mere speculation.

With respect to the McCurdy Declaration, it is noted that the processing conditions were produced in accordance with Example 1 (paragraph 7). It should be noted that there were variations (albeit deemed minor by the applicant in line 3) and this may result in the claimed characteristics. Regardless, the applicant has not utilized the same line speed or the use of a silica

Art Unit: 1762

coating as that or the original specification and hence, may have produced different results. There is no conclusive evidence that these did not produce the claimed characteristics.

Furthermore, applicant has merely mentioned substrate transportation technique, a silica coating, specific precursors and carrier gas, substrate and precursor temperature, line speed, mixture, mixer, and volume percent composition. There is no mention of the annealing properties including rate, temperature, atmosphere, heating source nor is there any mention of substrate purity, substrate crystallinity, processing pressure, precursor purity all of which can account for the claimed characteristics. MPEP 2163.07 (a) states that to establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

Assuming that it could be established that the claimed characteristics would be inherent to the claimed process, it is noted that the claims as presently written do not recite these limitations. Applicant would need to include these specific parameters in order for the new matter rejection to be withdrawn.

Applicant next argues that annealing the float ribbon in air is not new matter as Figure 1 shows annealing the glass ribbon in an annealing Lehr (p.11 paragraph 1).

Art Unit: 1762

The examiner disagrees. Nowhere in the original specification is there any teaching that the annealing is done in air. If the applicant can establish that there is no other atmosphere that the annealing could be performed in, the examiner will consider withdrawing this portion of the rejection.

Applicant next argues that the language deemed new matter in claims 37 and 51 is not new matter because they are Jepson-type format claims (p.11 4th paragraph).

The examiner disagrees. The preamble elements in a Jepson-type claim are impliedly admitted to be old in the art, ... but it is only an implied admission. *In re Ehrreich*, 590 F.2d 902, 909-910 200 USPQ 504, 510. But it does nothing to remove the new matter rejection. The examiner contends that something can be old in the art and still be new matter for the instant application. In addition, the applicant has not provided any factual evidence that the subject matter contained within the preamble is actually well known in the art.

Applicant next argues that the silica layer inhibits migration of sodium ions is inherent as noted in a US Patent 6,265,076 (p.12 fourth full paragraph).

The examiner disagrees. It is noted that the applicant has not established that all silica layers would inhibit migration. The cited reference does not teach that all silica layers would inhibit migration nor does the claim presently recite any coating thickness. There is no conclusive evidence that any silica layer would produce barrier protection nor the fact that any layer thickness does in fact prevent migration.

Art Unit: 1762

Applicant next argues that “glass sheet” is not new matter because the specification teaches a continuous glass ribbon (p.13 first paragraph).

The examiner disagrees. A sheet is defined as “a broad thin rectangular piece of material such as paper, metal, glass, or wood” (Webster’s II New Riverside University Dictionary 1984). Clearly, a sheet is different from that of a continuous glass ribbon. The examiner contends that one skilled in the art would know that these are not the same geometrical configurations.

Applicant next argues that the reaction rates have been calculated from the samples prepared with Example 1 as noted in the McCurdy Declaration and thus are not new matter (p.13 last paragraph).

The examiner disagrees. This issue has been addressed above but summarized again. It is first noted that these reaction rates were never disclosed in the original specification. Secondly, the calculations provided in the McCurdy Declaration merely recites that they were calculated from the Examples but does not disclose what the parameters in which the films were formed. Thirdly, other non-listed parameters could be varied to get different reaction rates. Hence, there is no factual evidence showing every titanium dioxide film getting the same reaction rate.

Applicant next argues that the steps in claim 35 are clear (p.15 third full paragraph).

The examiner disagrees. It is noted that the previous office action asked whether the deposition step is different from the production step. It cannot be determined from the response what the answer is. If the production step is different, then it should be clear how it differs from the deposition step.

Art Unit: 1762

Applicant's arguments have been considered but are not deemed persuasive.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bret Chen whose telephone number is (703) 308-3809. The examiner can normally be reached on Monday through Friday from 10:00 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck, can be reached on (703) 308-2333. The fax phone number for this Group is (703) 872-9310. Amendment After Finals should be faxed to (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

bc

August 27, 2003


BRET CHEN
PRIMARY EXAMINER